# Contents List

## Tutorial Paper

Can Process-Based and Product-Based Approaches to Software Safety Certification be Reconciled?
*Tim Kelly* .................................................................................................................... 3

## Themes Reprised from SSS ‘07

Making Safe Software Secure
*Odd Nordland* ........................................................................................................ 15

Safety Process Improvement with POSE and Alloy
*Derek Mannering, Jon Hall and Lucia Rapanotti* .................................................... 25

How to Select a Programming Language Subset to Maximise Software Quality
*Wojciech Basalaj* ................................................................................................... 43

## The Safety Case

Safety Case Development – How can I continue the work?
*Tadeusz Cichocki* .................................................................................................. 59

Safety Case Experiences from Harrier
*Jeff Lucas* ................................................................................................................ 77

## Safety Culture

Investigation to Establish Whether Cultural Analysis Can Be Used to Improve the Interactions Between Design, Safety and Operations Departments
*Tim Smith* ............................................................................................................... 95

Human Performance Improvement – Reducing Significant Events in Nuclear Power
*Don Goble* .................................................................................................................. 117

## Human Factors

A Human Factors Perspective on Safety Management Systems
*Christopher Lowe* ..................................................................................................... 139

Human Factors Safety Assurance for Changing ATM Systems
*Stephen Clark, Steven Shorrock and Nic Turley* ....................................................... 155
Achieving and Improving System Safety

Practical Ways of Improving Product Safety in Industry
*Gabriele Schedl and Werner Winkelbauer* ................................................................. 177

Prototyping versus Formal Development
*Mike Ainsworth* ........................................................................................................ 195

Systems Approach to Unmanned Air Vehicle Development and Certification
*Richard Sleeman, Andrew Cox and Jenny Colledge* .................................................. 209

Safety and Risk Analysis

Safety Analysis: Thoughts on Methods and Experience
*Michael Ellims* .......................................................................................................... 225

Simplifying the Creation and Use of the Risk Matrix
*Robin Cook*................................................................................................................ 239

Author Index .............................................................................................................. 265